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REMOVAL SUPPORT TEAM 3
EPA CONTRACT EP-S2-14-01

December 4, 2014

Mr. Angel Rodriguez, On-Scene Coordinator
U.S. Environmental Protection Agency
Response and Prevention Branch
Caribbean Environmental Protection Division, Region II
1492 Peñuelas De Leon Ave., Suite 417
San Juan, PR 00907-4127

EPA CONTRACT No.: EP-S2-14-01

TDD No.: TO-0001-0005

DOCUMENT CONTROL No.: RST3-01-D-0077

**SUBJECT: PERSONAL AIR SAMPLING TRIP REPORT – PUERTO RICO OLEFINS
ASBESTOS SITE, PEÑUELAS, PUERTO RICO**

Dear Mr. Rodriguez,

Enclosed please find the Personal Air Sampling Trip Report for the air sampling activities conducted from September 30, 2014 through October 23, 2014 at the Puerto Rico Olefins Asbestos Site located in Peñuelas, Puerto Rico. If you have any questions or comments please do not hesitate to contact me at (787) 354-2489.

Sincerely,

Weston Solutions, Inc.

Carlos Huertas
RST 3 Site Project Manager

Enclosure

cc: TDD File No.: TO-0001-0005

an employee-owned company

In association with Scientific and Environmental Associates, Inc.,
Environmental Compliance Consultants, Inc., Avatar Environmental, LLC,
On-Site Environmental, Inc., and Sovereign Consulting, Inc.



**PERSONAL AIR SAMPLING TRIP REPORT
PUERTO RICO OLEFINS ASBESTOS SITE
PEÑUELAS, PUERTO RICO**

Prepared for:

U.S. Environmental Protection Agency
Region II – Response and Prevention Branch
Edison, New Jersey 08837

Prepared by:

Removal Support Team 3
Weston Solutions, Inc.
East Division
Edison, New Jersey 08837

DC No.: RST3-01-D-0077
TDD No.: TO-0001-0005
EPA Contract No.: EP-S2-14-01

December 2014

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PERSONAL AIR SAMPLING TRIP REPORT

SITE NAME: Puerto Rico Olefins Asbestos Site
DC No.: RST3-01-D-0077
TDD No.: TO-0001-0005
SAMPLING DATES: September 30, 2014 through October 23, 2014

1. Site Location: Peñuelas, Puerto Rico
Refer to Attachment A, Figure 1: Site Location Map

2. Sample Descriptions: A total of air samples, including three field blanks and one lot blank. Refer to Attachment A, Figure 2: Sample Location Map and Attachment B, Table 1: Sample Collection Information and PCM Validated Analytical Data Summary and Table 2: Sample Collection Information and TEM Validated Analytical Data Summary.

3. Laboratory Receiving Samples:

Lab Name/Location	Sample Type	Parameters
Batta Laboratories 6 Garfield Way Newark, DE 19713	Air	Asbestos PCM - NIOSH 7400 Asbestos TEM - NIOSH 7402

4. Sample Dispatch Data:

On October 2, 2014, Weston Solutions Inc., Removal Support Team 3 (RST 3) shipped eight air samples, including one field blank and one lot blank, under Chain of Custody (COC) Record Number (No.) 2-1002014-00010005-0001 and FedEx Airbill No. 800093579235. On October 13, 2014, RST 3 shipped two air samples, including one field blank, under COC No. 2-101314-00010005-0001 and FedEx Airbill No. 800093579268. On October 23, 2014, RST 3 shipped two air samples, including one field blank, under COC No. 2-102314-00010005-0001 and FedEx Airbill No. 800093579279.

All samples were submitted to Batta Laboratories located in Newark, Delaware for asbestos analysis. Refer to Attachment C for Chain of Custody Records and FedEx Airbills.

5. Personnel On Site:

<u>Name</u>	<u>Representing</u>	<u>Duties On-Site</u>
Carlos Huertas	RST 3, Region II	Site Project Manager, Field Coordinator, Site Health and Safety, Sample Collection and Sample Management
Angel Alicea	RST 3, Region II	Sample Collection and Sample Management

6. Site Background:

The Puerto Rico Olefins Asbestos Site (the Site) is located at Road 385, KM 5.4, Tallaboa, Poniente Peñuelas, Puerto Rico. During a visual inspection, the U.S. Environmental Protection Agency (EPA) identified fugitive dust clouds migrating out of the facility during demolition activities conducted by HOMECA Inc. Beginning in 2010 and continuing until the present, an asbestos abatement occurred at the Site. Improper asbestos abatement techniques may have been used at the Site resulting in potential asbestos contamination throughout the Site and in residential neighborhoods downwind of the Site.

On November 21, 2013, as part of Phase I of the Removal Assessment, the EPA On-Scene Coordinator (OSC), EPA Air Program representative, and Weston Solutions, Inc., Removal Support Team 2 (RST 2) (currently RST 3) mobilized to the Site to perform multi-media sampling. As directed by the EPA OSC, RST 2 collected five bulk samples, including one field duplicate, four soil samples, including one field duplicate, and 10 wipe samples, including one wipe blank. Bulk samples were collected and submitted for asbestos analysis via EPA 600/R-93/116 Method using Polarized Light Microscopy (PLM). Soil samples were collected and submitted for asbestos analysis via modified EPA 600/R-93/116 Method using Transmission Electron Microscopy (TEM) with California Air Resource Board (CARB) 435 prep. Wipe samples were collected and submitted for asbestos analysis via American Society for Testing Materials (ASTM) 6480-05 Method. Samples were collected from outside areas where suspected asbestos contamination may have occurred and inside areas where asbestos may have entered the building.

On December 13, 2013, as part of Phase I of the Removal Assessment, the EPA OSC and RST 2 remobilized to the Site to collect two additional bulk samples. The additional bulk samples were collected from two specific locations as directed by the EPA OSC. The two bulk samples were collected and submitted for asbestos analysis via EPA 600/R-93/116 Method using PLM. Samples were collected from outside areas where suspected asbestos contamination may have occurred.

Based on the validated analytical results of the samples collected as part of Phase I of the Removal Assessment, asbestos was detected in bulk samples ranging from non-detect to 40 percent (%) amosite and 20% chrysotile, in soil samples ranging from 3 amosite/chrysotile asbestos structures to 9 amosite/chrysotile asbestos structures, and in wipe samples ranging from 7,760 structures per square centimeter (str/cm²) to 374,000 str/cm². The two additional bulk samples collected on December 13, 2013 were both non-detect for asbestos. The wipe blank sample was non-detect for asbestos.

On December 4 and 5, 2013, as part of Phase II of the Removal Assessment, the EPA OSC and RST 2 mobilized to the Jorge Lucas Perez Valdivieso School, located approximately 0.25 miles south of the Site, to conduct air sampling activities within classrooms identified by the EPA OSC. The school is separated into two areas referred to be RST 2 as Area 1 and Area 2. The two separate areas are separated by a road way. As directed by the EPA OSC, RST 2 established three air sampling stations within eight of the schools classrooms (CR01 through CR08). Air samples were collected from each of the established air sampling stations within each classroom but per the request of the EPA OSC only one of the air samples from each of the classrooms was submitted for asbestos analysis.

On December 5, 2013, as part of Phase II of the Removal Assessment, RST 2 shipped 11 air samples, including two lot blanks and one field blank, to the EMSL Analytical, Inc. laboratory for asbestos analysis via Method ISO 10312 - International Standard for the Determination of Asbestos Fibers - Direct Transfer. Per the request of the EPA OSC, on December 13, 2013, RST 2 shipped the additional two air samples collected on December 4, 2013 from classroom CR01 to the EMSL Analytical, Inc. laboratory for asbestos analysis via Method ISO 10312 - International Standard for the Determination of Asbestos Fibers - Direct Transfer.

Based on the validated analytical results of the samples collected as part of Phase II of the Removal Assessment, chrysotile asbestos was detected in eight of the 10 field air samples submitted for asbestos analysis. The total number of asbestos structures in the positive detections ranged between 2 and 25. The reported concentrations in the positive detections ranged between 0.0004 structures per cubic centimeter (s/cc) and 0.0032 s/cc.

On December 12 and 13, 2013, as part of Phase IIIA of the Removal Assessment, the EPA OSC and RST 2 mobilized to the Jorge Lucas Perez Valdivieso School to perform wipe sampling within the classrooms of the school. The areas identified in each classroom to be sampled were the entrance, near a window, and the dustiest area in the room. A total of 90 wipe samples, including five field blanks and one lot blank, were collected from 28 classrooms (CR01 through CR29, excluding CR27). Classroom CR27 and some other general areas of the school were not sampled due to the fact that the areas were not accessible or as directed by the EPA OSC. Wipe samples were collected and submitted for asbestos analysis via ASTM 6480-05 Method.

Based on the validated analytical results of the samples collected as part of Phase IIIA of the Removal Assessment, asbestos was detected in wipe samples ranging from non-detect to 363,000 str/cm². The wipe blank samples were non-detect for asbestos.

On December 17 through 19, 2013, as part of Phase IIIB of the Removal Assessment, the EPA OSC and RST 2 mobilized to the Tallaboa Encarnacion Community to perform wipe sampling on the exterior of several properties. As directed by the EPA OSC, the area identified to be sampled had to be exposed to ambient air, but not exposed to rain or had not been cleaned recently. A total of 27 wipe samples, including two field blanks, were collected from 24 properties (P0005 through P0028). Wipe samples were collected and submitted for asbestos analysis via ASTM 6480-05 Method.

Based on the validated analytical results of the samples collected as part of Phase IIIB of the Removal Assessment, asbestos was detected in wipe samples from non-detect to 32,200,000 str/cm². The wipe blank samples were non-detect for asbestos.

On January 2 and 3, 2014, as part of Phase IIIC of the Removal Assessment, the EPA OSC, RST 2, and the Puerto Rico Environmental Quality Board (EQB) mobilized to background locations, selected by the EPA OSC, at different distances and directions from the Site. As directed by the EPA OSC, the area identified to be sampled had to be exposed to ambient air, but not exposed to rain or have not been cleaned recently. A total of 13 wipe samples, including one field blank, were collected from 12 properties (P0029 through P0040). Properties P0029 through P0032 were located over five miles northwest of the Site;

properties P0033 through P0036 were located over one mile north of the Site; and properties P0037 through P0040 were located over two miles southeast of the Site. Wipe samples were collected and submitted for asbestos analysis via ASTM 6480-05 Method.

Based on the validated analytical results of the samples collected as part of Phase IIIC of the Removal Assessment, asbestos was detected in wipe samples ranging from non-detect to 160,000 str/cm². The wipe blank sample was non-detect for asbestos.

On January 9, 2014, as part of Phase IIID of the Removal Assessment, the EPA OSC and RST 2 mobilized to the Head Start Encarnacion School (property P0014) to perform wipe sampling activities within the school. As directed by the EPA OSC, RST 2 collected five wipe samples from inside the classroom. The areas identified in each classroom to be sampled were the entrance, near a window, the dustiest area in the room, and two other high use areas. A total of five wipe samples were collected from property P0014. Wipe samples were collected and submitted for asbestos analysis via ASTM 6480-05 Method.

Based on the validated analytical results of the samples collected as part of Phase IIID of the Removal Assessment, asbestos was detected in wipe samples ranging from 2,910 str/cm² to 41,700 str/cm².

From March 4 through 27, 2014, as part of Phase IV of the Removal Assessment, the EPA OSC and RST 2 mobilized to the Tallaboa Encarnación area in Peñuelas, Puerto Rico to perform indoor air and micro vac sampling activities at 32 residential/commercial properties (property P0008 is considered two separate properties) located within 0.25 miles of the Site. Air samples were submitted for asbestos analysis via phase contrast microscopy (PCM) Method [National Institute for Occupational Safety and Health (NIOSH) 7400] and TEM Method (NIOSH 7402), and/or ISO Method 13794:199(E). Micro vac samples were submitted for asbestos analysis via ASTM Method D-5755-09.

Based on the validated PCM analytical results of the air samples collected as part of Phase IV of the Removal Assessment, asbestos was detected in each property sampled at concentrations ranging from <0.001 fibers per cubic centimeter (F/cc) to 0.02 F/cc. Six properties sampled were not able to be run for PCM analysis due to the cassettes being overloaded with particulates.

Based on the validated TEM analytical results of the air samples collected as part of Phase IV of the Removal Assessment, chrysotile, anthophyllite, actinolite, or tremolite asbestos fibers were detected in 16 of the 32 properties sampled. The reported concentrations in the positive detections ranged between 0.00018 s/cc to 0.5299 s/cc. In addition, six properties (including the separated property P0008) contained asbestos concentrations which exceeded the Site-Specific Action Levels of 0.0009 s/cc for residential properties and 0.002 s/cc for commercial properties.

Based on the validated TEM analytical results of the micro vac samples collected as part of Phase IV of the Removal Assessment, chrysotile, actinolite, or amosite asbestos fibers were detected in 26 of the 32 properties sampled. The reported concentrations in the positive detections ranged between 231.3 s/cm² to 12,782,000.0 s/cm². In addition, 13 properties (including the separated property P0008) contained asbestos concentrations which exceeded the Site-Specific Action Levels of 5,000 s/cm².

In April 2014, the potentially responsible party (PRP) initiated Removal Actions at the Jorge Lucas Perez Valdivieso School and the Head Start Encarnacion School. The Removal Actions were completed in August 2014.

7. Personal Air Sampling Summary:

From September 30, 2014 through October 23, 2014, RST 3 mobilized to the Site (property P0001) to provide maintenance to the DUSTTRAK™ units installed on the Site. Personal air samples were collected to determine personal exposure within the Contamination Reduction Zone (CRZ) where the DUSTTRAK™ units are installed. A total of 12 personal air samples, including three field blanks and one lot blank, were collected and submitted for asbestos analysis by NIOSH Method 7400 (PCM) and Method 7402 (TEM).

Air samples were collected utilizing GilAir Plus air sampling pumps. A volume of approximately 500 liters was collected, for each sample at the rate of 2.0 to 3.0 liters per minute (L/min) for 3 to 4 hours to achieve 0.005 F/cc reporting limit as determined by the EPA. Sample pumps were calibrated in the Support Zone utilizing a BIOS DryCal and a clean sample cartridge of the same type as that used during sample collection. All air samples were collected in accordance with EPA Environmental Response Team (ERT) Standard Operating Procedure (SOP) Nos. 2008 and 2015.

8. Analytical Discussion:

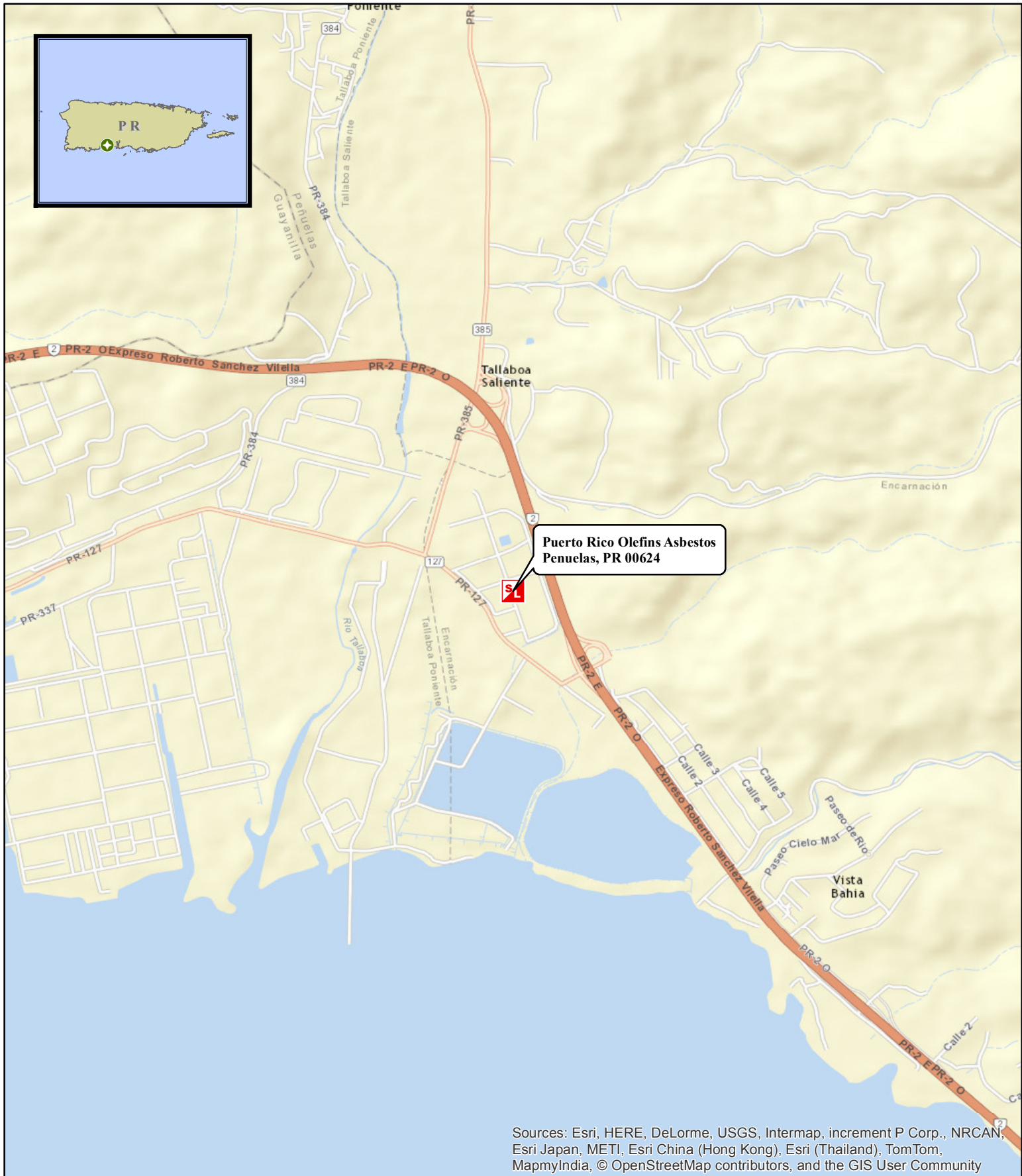
Based on the asbestos PCM validated analytical results of the samples collected as part of personal air monitoring sampling event, asbestos was detected in two of the eight field samples at a concentration of 0.006 F/cc; however, asbestos was not detected and any of the samples at concentrations exceeding the Site-Specific Action level of 0.1 F/cc. Based on the asbestos TEM validated analytical results, all samples were non-detect for asbestos. Refer to Attachment B, Table 1: Sample Collection Information and PCM Validated Analytical Data Summary; Table 2: Sample Collection Information and TEM Validated Analytical Data Summary; and Attachment D Personal Air Sampling Data Validation Memorandum.

Report prepared by:  _____ **Date:** 12/4/2014
Carlos Huertas
RST 3 Site Project Manager

Report reviewed by:  _____ **Date:** 12/4/2014
Timothy Benton
RST 3 Operations Manager

ATTACHMENT A

Figure 1: Site Location Map
Figure 2: Sample Location Map



Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Legend

 Site Location

0 0.05 0.1 0.2 0.3 0.4
Miles



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On-Site Environmental, Inc., and Sovereign Consulting, Inc.

Figure 1 Site Location Map

**Puerto Rico Olefins Asbestos
Penuelas, Puerto Rico**

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL SUPPORT TEAM 3
CONTRACT # EP-S2-14-01

GIS ANALYST: T. BENTON
EPA OSC: A. RODRIGUEZ
RST SPM: C. HUERTAS
FILENAME: SITEMAP.MXD

DATE MODIFIED: 12/26/2013



Note: Air samples PAS01-101314 and PAS01-102314 were collected from the general DustTrak area.

Legend

Air Monitoring Station Location

Site Boundary

0 62.5 125 250 375 500 Feet



WESTON SOLUTIONS **Weston Solutions, Inc.**
East Division

In association with
Scientific and Environmental Associates, Inc.,
Avatar Environmental, LLC, Environmental Compliance Consultants,
On-Site Environmental, Inc., and Sovereign Consulting, Inc.

Figure 2:
Sample Location Map

PUERTO RICO OLEFINS ASBESTOS SITE
PENUELAS, PUERTO RICO

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL SUPPORT TEAM 3
CONTRACT # EP-S2-14-01

DATE MODIFIED: 12/4/2014
GIS ANALYST: T. BENTON
EPA OSC: A. RODRIGUEZ
RST SPM: C. HUERTAS
FILENAME: 141204_Air Sampling Location Map.mxd

ATTACHMENT B

Table 1: Sample Collection Information and PCM Validated Analytical Data Summary

Table 2: Sample Collection Information and TEM Validated Analytical Data Summary

Table 1: Sample Collection Information and PCM Validated Analytical Data Summary
Puerto Rico Olefins Asbestos Site
Peñuelas, Puerto Rico
September 30, 2014 through October 23, 2014

Sample #	Sample Location	Sample Date	Sample Time	Matrix	Analysis	Sample Type	Fibers	Test Results (F/mm ²)	Test Results (F/cc)
P0001-AS04-093014	DustTrak 1	9/30/2014	14:30	Ambient Air	Asbestos PCM (NIOSH 7400)	Field Sample	<5.5	<7.0	<0.004
P0001-AS05-093014	DustTrak 2	9/30/2014	14:21	Ambient Air	Asbestos PCM (NIOSH 7400)	Field Sample	<5.5	<7.0	<0.004
P0001-AS06-093014	DustTrak 3	9/30/2014	14:22	Ambient Air	Asbestos PCM (NIOSH 7400)	Field Sample	7.5	9.6	0.006
FB-100214-001	NA	10/2/2014	14:55	Field Blank	Asbestos PCM (NIOSH 7400)	Field Blank	<5.5	<7.0	-
LOTB-100214-001	NA	10/2/2014	14:50	Lot Blank	Asbestos PCM (NIOSH 7400)	Lot Blank	<5.5	<7.0	-
P0001-AS07-100214	DustTrak 1	10/2/2014	14:30	Ambient Air	Asbestos PCM (NIOSH 7400)	Field Sample	<5.5	<7.0	<0.004
P0001-AS08-100214	DustTrak 2	10/2/2014	14:32	Ambient Air	Asbestos PCM (NIOSH 7400)	Field Sample	<5.5	<7.0	<0.004
P0001-AS09-100214	DustTrak 3	10/2/2014	14:35	Ambient Air	Asbestos PCM (NIOSH 7400)	Field Sample	8	10.2	0.006
PAS01-101314	DustTrak Area	10/13/2014	14:31	Ambient Air	Asbestos PCM (NIOSH 7400)	Field Sample	<5.5	<7.0	<0.005
PAS01-102314	DustTrak Area	10/23/2014	13:45	Ambient Air	Asbestos PCM (NIOSH 7400)	Field Sample	<5.5	<7.0	<0.005
FB-101314-001	NA	10/13/2014	14:31	Field Blank	Asbestos PCM (NIOSH 7400)	Field Blank	<5.5	<7.0	-
FB-102314-001	NA	10/23/2014	13:45	Field Blank	Asbestos PCM (NIOSH 7400)	Field Blank	<5.5	<7.0	-

NA = Not Applicable

PCM = Phase Contrast Microscopy

F/mm² = Fibers per square millimeter

F/cc = Fibers per cubic centimeter

Table 2: Sample Collection Information and TEM Validated Analytical Data Summary
Puerto Rico Olefins Asbestos Site
Peñuelas, Puerto Rico
September 30, 2014 through October 23, 2014

Sample #	Sample Location	Sample Date	Sample Time	Matrix	Analysis	Sample Type	Total Numbers of Asbestos Structures Detected	Reported Sensitivity (F/cc)	Reported Air Concentration (F/cc)
P0001-AS04-093014	DustTrak 1	9/30/2014	14:30	Ambient Air	Asbestos TEM (NIOSH 7402)	Field Sample	None Detected	0.00165	<0.004
P0001-AS05-093014	DustTrak 2	9/30/2014	14:21	Ambient Air	Asbestos TEM (NIOSH 7402)	Field Sample	None Detected	0.00165	<0.004
P0001-AS06-093014	DustTrak 3	9/30/2014	14:22	Ambient Air	Asbestos TEM (NIOSH 7402)	Field Sample	None Detected	0.00169	<0.004
FB-100214-001	NA	10/2/2014	14:55	Field Blank	Asbestos TEM (NIOSH 7402)	Field Blank	NA	NA	NA
LOTB-100214-001	NA	10/2/2014	14:50	Lot Blank	Asbestos TEM (NIOSH 7402)	Lot Blank	NA	NA	NA
P0001-AS07-100214	DustTrak 1	10/2/2014	14:30	Ambient Air	Asbestos TEM (NIOSH 7402)	Field Sample	None Detected	0.00171	<0.004
P0001-AS08-100214	DustTrak 2	10/2/2014	14:32	Ambient Air	Asbestos TEM (NIOSH 7402)	Field Sample	None Detected	0.00171	<0.004
P0001-AS09-100214	DustTrak 3	10/2/2014	14:35	Ambient Air	Asbestos TEM (NIOSH 7402)	Field Sample	None Detected	0.00154	<0.004
PAS01-101314	DustTrak Area	10/13/2014	14:31	Ambient Air	Asbestos TEM (NIOSH 7402)	Field Sample	None Detected	0.00187	<0.004
PAS01-102314	DustTrak Area	10/23/2014	13:45	Ambient Air	Asbestos TEM (NIOSH 7402)	Field Sample	None Detected	0.00206	<0.005
FB-101314-001	NA	10/13/2014	14:31	Field Blank	Asbestos TEM (NIOSH 7402)	Field Blank	NA	NA	NA
FB-102314-001	NA	10/23/2014	13:45	Field Blank	Asbestos TEM (NIOSH 7402)	Field Blank	NA	NA	NA

NA = Not Applicable

TEM = Transmission Electron Microscopy

F/cc = Fibers per cubic centimeter

ATTACHMENT C

Chain of Custody Records and FedEx Airbills

CHAIN OF CUSTODY RECORD
Site #: 0001-0005
Contact Name: Smilga Sumbaly
Contact Phone: 732-585-4410

USEPA
DateShipped: 10/2/2014
CarrierName: FedEx
AirbillNo: 8000 9357 9235

CHAIN OF CUSTODY RECORD

[illegible]

Special Instructions: Total Sampling time units in minutes.

Turnaround time 72 hrs.

Provide TWA calculations.

REF: 303

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time
Will Trust	Carlon Hueston	10/27/89	BONNIE WEAVER	10/31/89	1000

[illegible]

Special Instructions: Total Sampling time units in minutes.

Turnaround time 72 hrs.

Provide TWA calculations.

RF#: 303

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
all/mast	Amg/11/11/11	10-13-14	Buniel/Mu: BANA HABITACIONES	01/14/16 10:20	ACCEPTANCE

CHAIN OF CUSTODY RECORD

No: 2-102314-00010005-0001

USEPA

Date Shipped: 10/23/2014

PR Olefins Removal

CarrierName: FedEx

Contact Name: Smita Sumbaly

Cooler #: 001

Lab: Batta environmental Associates, Inc.

Airbill No: 800093579279

Contact Phone: 732-585-4410

[illegible]

Special Instructions: Total Sampling time units in minutes.

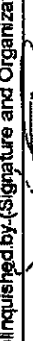

Turnaround time 72 hrs.

Provide TWA calculations.

RF#: 303

TCM vol.

<p>Special Instructions: Total Sampling time units in minutes. Turnaround time 72 hrs. Provide TWA calculations.</p>	<p>SAMPLES TRANSFERRED FROM</p>
<p>CHAIN OF CUSTODY #</p>	<p>72 M WOL.</p>

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Ally Trans		6-23-01		6/23/01	Good



Expanded Service International Air Waybill

For FedEx services worldwide including express freight services, dangerous goods, broker select, and letter of credit.

Sender's Copy

1 From Please print and press hard.
Date 12/2/14 Sender's FedEx Account Number SENDER'S FEDEX ACCOUNT NUMBER ONLY
Sender's Name Carlos L. Huertas Phone 787-354-2489
Company Weston Solutions
Address 1715 Ponce de Leon Ave
Address Suite C
City Santurce State/Province Puerto Rico
Country USA ZIP Postal Code 00909

2 To
Recipient's Name Mr. Batta Phone 302-737-3376
Company Batta Environmental
Address 6 Garfield Way
Address
City Newark State/Province DE
Country USA ZIP Postal Code 19713-5817
Recipient's Tax ID Number for Customs Purposes
e.g., GST/RFC/VAT/IN/EIN/ABN, or as locally required.

3 Shipment Information

Total Packages 1 Total Weight 1 lbs. 1 kg 1 DIM 1 / 1 / 1 in. 1 cm

Commodity Description	Harmonized Code	Country of Manufacture	Value for Customs
DETAIL REQUIRED. PRINT IN ENGLISH.			
<u>Environmental Air</u>			
<u>Samples</u>			

Has EEI been filed in AES? ☒ For U.S. Export Only: Check One
☒ No EEI required, value \$2,500 or less per Schedule B Number; no license required (NLR), not subject to ITAR.
☐ No EEI required, enter exemption number: _____
☐ Yes - Enter AES proof of filing citation: _____

Total Declared Value for Carriage 100.00 Total Value for Customs (Specify Currency) 100.00 USD

For Completion Instructions, see back of fifth page.

Questions?
Go to our Web site at fedex.com.

In the U.S., call 1.800.GoFedEx 1.800.463.3339.
Outside the U.S., call your local FedEx office.

The terms and conditions of service may vary from country to country. Consult our local office for specific information.
Non-Negotiable International Air Waybill • ©1994-2008 FedEx

The World On Time.

Not all services and options are available to all destinations.

4a Express Package Service Packages up to 150 lbs. / 68 kg
☒ FedEx Intl. Priority ☐ FedEx Intl. First Available to select locations. ☐ FedEx Intl. Economy FedEx Envelope and FedEx Pak rate not available.

4b Express Freight Service Packages over 150 lbs. / 68 kg
☐ FedEx Intl. Priority Freight ☐ FedEx Intl. Economy Freight
Booking Number REQUIRED
Please call your local FedEx office to book shipments.

5 Packaging *These unique brown boxes with special pricing are provided by FedEx for FedEx Intl. Priority only.
☐ FedEx Envelope ☐ FedEx Pak ☐ FedEx Box ☐ FedEx Tube
☐ Other ☐ FedEx 10kg Box* ☐ FedEx 25kg Box*

6a Special Handling
☐ HOLD at FedEx Location ☐ SATURDAY Delivery Available to select locations for FedEx Intl. Priority and FedEx Intl. Priority Freight only.
Does this shipment contain dangerous goods?
☒ No ☐ Yes As per attached Shipper's Declaration ☐ Shipper's Declaration not required. ☐ Dry Ice Dry ice, 9, UN 1845 kg ☐ Cargo Aircraft Only
Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

6b Broker Selection Not available with FedEx Intl. First. ☐ Intl. Broker Select To specify a broker other than FedEx.
Broker's Name
City / State / Province / Country
ZIP / Postal Code REQUIRED Phone

7 Payment Complete payment options for both transportation charges and duties and taxes.
Bill transportation charges to:
☐ Sender Acct. No. in Section 1 will be billed. ☒ Recipient ☐ Third Party ☐ Credit Card ☐ Cash Check/ Cheque ☐ FedEx Use Only
FedEx Acct. No. 402356103
Credit Card No.
Credit Card Exp. Date

Bill duties and taxes to: ALL shipments may be subject to Customs charges, which FedEx does not estimate prior to clearance.
☐ Sender Acct. No. in Section 1 will be billed. ☐ Recipient ☐ Third Party
FedEx Acct. No. 402356103

8 Your Internal Billing Reference First 24 characters will appear on invoice.
P.R. de fins

Required Signature
Use of this Air Waybill constitutes your agreement to the Conditions of Contract on the back of this Air Waybill, and you represent that this shipment does not require a U.S. State Department license. Certain international treaties, including the Warsaw Convention, may apply to this shipment and limit our liability for damage, loss, or delay, as described in the Conditions of Contract.
WARNING: These commodities, technology, or software were exported from the United States in accordance with Export Administration regulations. Diversion contrary to U.S. law prohibited.
Sender's Signature: [Signature]
This is not authorization to collect this shipment without a recipient signature.
FedEx Courier Receipt: _____ Date: _____
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FedEx Tracking Number

8000 9357 9235

Form ID No. 0425

569

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Expanded Service International Air Waybill

For FedEx services worldwide including express freight services, dangerous goods, broker select, and letter of credit.

Sender's Copy

1 From Please print and press hard.

Date 10/18/14 Sender's FedEx Account Number SENDER'S FEDEX ACCOUNT NUMBER ONLY

Sender's Name Angel Alice Phone 787 365 9290

Company Weston Solutions

Address 1715 Ponce de Leon Ave.

Address Suite 2

City Santurce State PR

Country USA ZIP Postal Code 00909

2 To

Recipient's Name Mr. Batta Phone 302-737-3376

Company Batta Environmental

Address 6 Garfield Way

Address

City Newark State DE

Country USA ZIP Postal Code 19713-5817

Recipient's Tax ID Number for Customs Purposes
e.g., GST/RFC/VAT/EIN/ABN, or as locally required.

3 Shipment Information

Total Packages 1 Total Weight 1 ☒ lbs. ☐ in. ☐ kg ☐ cm

Shipper's Load and Count/SLAC 1 DIM L / W / H

Commodity Description	Harmonized Code	Country of Manufacture	Value for Customs
DETAIL REQUIRED. PRINT IN ENGLISH			
<u>Environmental Air Samples</u>			<u>100.00 USD</u>

Has EEI been filed in AES? ☐ For U.S. Export Only: Check One ☐ For EU Only: Tick here if goods are not in free circulation and provide C.I. ☐

No EEI required, value \$2,500 or less per Schedule B Number, no license required (NLR), not subject to ITAR. ☐

No EEI required, enter exemption number: ☐

Yes - Enter AES proof of filing citation: ☐

Total Declared Value for Carriage 100.00 USD Total Value for Customs (Specify Currency) 100.00 USD

The World On Time.

Not all services and options are available to all destinations.

4a Express Package Service Packages up to 150 lbs. / 68 kg

☒ FedEx Intl. Priority ☐ FedEx Intl. First Available to select locations. ☐ FedEx Intl. Economy FedEx Envelope and FedEx Pak rate not available.

4b Express Freight Service Packages over 150 lbs. / 68 kg

☐ FedEx Intl. Priority Freight ☐ FedEx Intl. Economy Freight

Booking Number REQUIRED
Please call your local FedEx office to book shipments.

5 Packaging *These unique brown boxes with special pricing are provided by FedEx for FedEx Intl. Priority only.

☐ FedEx Envelope ☐ FedEx Pak ☒ FedEx Box ☐ FedEx Tube

☐ Other ☐ FedEx 10kg Box* ☐ FedEx 25kg Box*

6a Special Handling

☐ HOLD at FedEx Location ☐ SATURDAY Delivery Available to select locations for FedEx Intl. Priority and FedEx Intl. Priority Freight only.

Does this shipment contain dangerous goods?
☒ No ☐ Yes As per attached Shipper's Declaration. ☐ Yes Shipper's Declaration not required. ☐ Dry Ice Dry ice, 9 UN 1845 ☐ Cargo Aircraft Only

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

6b Broker Selection Not available with FedEx Intl. First. ☐ Intl. Broker Select To specify a broker other than FedEx.

Broker's Name

City / State / Province / Country

ZIP / Postal Code REQUIRED Phone

7 Payment Complete payment options for both transportation charges and duties and taxes.

Bill transportation charges to:
Enter FedEx Acct. No. or Credit Card No. below.

☐ Sender Acct. No. in Section 1 will be billed. ☐ Recipient ☒ Third Party ☐ Credit Card ☐ Cash Check/ Cheque FedEx Use Only

FedEx Acct. No. 402 35 6103

Credit Card No.

Credit Card Exp. Date

ALL shipments may be subject to Customs charges, which FedEx does not estimate prior to clearance.

Bill duties and taxes to:

Enter FedEx Acct. No. below.

☐ Sender Acct. No. in Section 1 will be billed. ☐ Recipient ☒ Third Party

FedEx Acct. No. 40235 6103

8 Your Internal Billing Reference First 24 characters will appear on invoice.

PR OP 01efing

9 Required Signature

Use of this Air Waybill constitutes your agreement to the Conditions of Contract on the back of this Air Waybill, and you represent that this shipment does not require a U.S. State Department license. Certain international treaties, including the Warsaw Convention, may apply to this shipment and limit our liability for damage, loss, or delay, as described in the Conditions of Contract.

WARNING: These commodities, technology, or software were exported from the United States in accordance with Export Administration regulations. Diversion contrary to U.S. law prohibited.

Sender's Signature: [Signature]

This is not authorization to deliver this shipment without a recipient signature.

FedEx Courier Receipt: [Signature] Date:

For letter of credit shipments only.

Ship and track packages at fedex.com

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In the U.S., call 1.800.GoFedEx 1.800.463.3339.
Outside the U.S., call your local FedEx office.

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ID No.

0425

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Expanded Service International Air Waybill

For FedEx services worldwide including express freight services, dangerous goods, broker select, and letter of credit.

Sender's Copy

1 From Please print and press hard.

Date 10/23/14 Sender's FedEx Account Number SENDER'S FEDEX ACCOUNT NUMBER ONLY
Sender's Name Angel Alicea Phone 787 365 9290
Company Weston Solutions
Address 1715 Ponce de Leon Ave
Address Suite 2
City Santurce State Province PR
Country USA ZIP Postal Code 00909

2 To

Recipient's Name Mr. Batte Phone 302-737-3376
Company Batta Environmental
Address 6 Garfield Way
Address
City Newark State Province DE
Country USA ZIP Postal Code 19713-5817
Recipient's Tax ID Number for Customs Purposes
e.g. GST/RFC/VAT/IN/EIN/ABN, or as locally required.

3 Shipment Information

Total Packages 1 Total Weight 1 ☒ lbs. ☐ in. ☐ kg ☐ cm
Shipper's Load and Count/SLAC 1 DIM 1 / 1 / 1

Commodity Description	Harmonized Code	Country of Manufacture	Value for Customs
DETAIL REQUIRED. PRINT IN ENGLISH			
<u>Environmental Air Samples</u>			<u>100.00 USD</u>
Has EEI been filed in AES? For U.S. Export Only: Check One <input checked="" type="checkbox"/> No EEI required, value \$2,500 or less per Schedule B Number; no license required (NLR), not subject to ITAR. <input type="checkbox"/> No EEI required, enter exemption number: _____ <input type="checkbox"/> Yes - Enter AES proof of filing citation: _____			Total Declared Value for Carriage <u>100.00 USD</u> Total Value for Customs (Specify Currency) <u>100.00 USD</u>

For Completion Instructions, see back of fifth page.

Questions?
Go to our Web site at fedex.com.

or
In the U.S., call 1.800.GoFedEx 1.800.463.3339.
Outside the U.S., call your local FedEx office.

The terms and conditions of service may vary from country to country. Consult our local office for specific information.
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The World On Time.

Not all services and options are available to all destinations.

4a Express Package Service Packages up to 150 lbs. / 68 kg
☒ FedEx Intl. Priority ☐ FedEx Intl. First Available to select locations. ☐ FedEx Intl. Economy Available to select locations. FedEx Envelope and FedEx Pak rate not available.

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Booking Number REQUIRED
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5 Packaging *These unique brown boxes with special pricing are provided by FedEx for FedEx Intl. Priority only.
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☐ Other ☐ FedEx 10kg Box* ☐ FedEx 25kg Box*

6a Special Handling
☐ HOLD at FedEx Location ☐ SATURDAY Delivery Available to select locations for FedEx Intl. Priority and FedEx Intl. Priority Freight only.
Does this shipment contain dangerous goods?
☐ No ☐ Yes As per attached Shipper's Declaration. ☐ Dry Ice Dry ice, 9, UN 1845 x kg ☐ Cargo Aircraft Only
Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

6b Broker Selection Intl. Broker Select To specify a broker other than FedEx.
Not available with FedEx Intl. First.
Broker's Name _____
City / State / Province / Country _____
ZIP / Postal Code REQUIRED Phone _____

7 Payment Complete payment options for both transportation charges and duties and taxes.
Bill transportation charges to:
Enter FedEx Acct. No. or Credit Card No. below.
☐ Sender Acct. No. in Section 1 will be billed. ☐ Recipient ☒ Third Party ☐ Credit Card
FedEx Acct. No. 402 35 6103
Credit Card No. _____
Credit Card Exp. Date _____
Cash Check/ Cheque FedEx Use Only

Bill duties and taxes to: ALL shipments may be subject to Customs charges, which FedEx does not estimate prior to clearance.
Enter FedEx Acct. No. below.
☐ Sender Acct. No. in Section 1 will be billed. ☐ Recipient ☒ Third Party
FedEx Acct. No. 402 35 6103

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WARNING: These commodities, technology, or software were exported from the United States in accordance with Export Administration regulations. Diversion contrary to U.S. law prohibited.
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This is not authorization to deliver this shipment without a recipient signature.
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ATTACHMENT D

Personal Air Sampling Data Validation Memorandum



Weston Solutions, Inc.
Suite 201
1090 King Georges Post Road
Edison, New Jersey 08837-3703
732-585-4400 • Fax: 732-225-7037
www.westonsolutions.com

The Trusted Integrator for Sustainable Solutions

REMOVAL SUPPORT TEAM 3
EPA CONTRACT EP-S2-14-01

RST3-01-F-0047

TRANSMITTAL MEMO

To: Ángel Rodríguez, On-Scene Coordinator
Caribbean Environmental Protection Branch
U.S. EPA, Region II

From: Smita Sumbaly, Data Reviewer
RST 3, Region II

Subject: Puerto Rico Olefins Asbestos Site
Data Validation Assessment

Date: November 10, 2014

The purpose of this memo is to transmit the following information:

- Data validation results for the following parameters:

Asbestos PCM and TEM	12 Samples
----------------------	------------
- Matrices and Number of Samples

Air	8 Samples
Lot/Field Blanks	4 Samples
- Sampling Dates: September 30, 2014 through October 23, 2014

The final data assessment narrative and original analytical data package are attached.

cc: RST 3 SPM: Carlos Huertas
RST 3 SITE FILE TDD #: TO-0001-0005
ANALYTICAL TDD #: TO-0001-0038
PCS#: 1038

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Environmental Compliance Consultants, Inc., Avatar Environmental, LLC,
On-Site Environmental, Inc., and Sovereign Consulting, Inc.



U.S. ENVIRONMENTAL PROTECTION AGENCY

MEMORANDUM

DATE: November 10, 2014

TO: Ángel Rodríguez, On-Scene Coordinator
U.S. EPA, Region II

FROM: Smita Sumbaly
RST 3 Data Review Team

SUBJECT: QA/QC Compliance Review Summary

As requested quality control and performance measures for the data packages noted have been examined and compared to EPA standards for compliance. Measures for the following general areas were evaluated as applicable:

Data Completeness
Sample Collection, Holding Times, and Preservation
Blank Analysis
Sample Sensitivity
Monthly Report PCM and TEM Calibrations

Any statistical measures used to support the following conclusions are attached so that the review may be reviewed by others.

Summary of Results

	I <u>Asbestos</u> <u>PCM</u>	II <u>Asbestos</u> <u>TEM</u>
Acceptable as Submitted	<u>X</u>	<u>X</u>
Acceptable with Comments	<u> </u>	<u> </u>
Unacceptable, Action Pending	<u> </u>	<u> </u>
Unacceptable	<u> </u>	<u> </u>

Data Reviewed by:

19
for

Smita Sumbaly

Date: 11/10/2014

Approved By:

[Signature]

Date: 11/10/14

Area Code/Phone No.:

(732) 585-4410

NARRATIVE

PCS No. 1038

SITE NAME: Puerto Rico Olefins Asbestos Site
PR 385 KM 5.4 Int., 127 Tallaboa Ponente,
Ward Penuelas, Puerto Rico

Laboratory Name: Batta Laboratories, 6 Garfield Way, Newark, DE 19713-5817.

INTRODUCTION:

The laboratory's portion of this case consisted of 12 air samples, including three field blanks and one lot blank. Samples were collected from September 30, 2014 through October 23, 2014. The Batta Laboratory project number is L6888J.

The laboratory reported No problem(s) with the receipt of these samples.

The laboratory reported No problems with the analyses of Asbestos PCM and TEM.

The evaluator has commented on the criteria specified under each fraction heading. All criteria have been assessed, but no discussion is given where the evaluator has determined that criteria were adequately performed or require no comment. Details relevant to these comments are given on the following forms.

Appropriate Form Is and Chain of Custody have been copied from the original data package and appended to the data assessment narrative for reference.

Title: Evaluation of Asbestos Data
Data Assessment Narrative

RFP #: 303/Task#: 1038

Site: Puerto Rico Olefins Asbestos Site

Lab: Batta Laboratories

Matrix/No. of Samples: Air/12

SDG#'s: L6888J

Reviewer: SMITA SUMBALY

Contractor: WESTON-RST 3

A.2.1 Validation Flags-

The following flags have been applied in red by the data validator and must be considered by the data user.

J-

This flag indicates the result qualified as estimated.

Red- Line-

A red-line drawn through a sample result indicates an unusable value. The red-lined data are known to contain significant errors based on documented information and must not be used by the data user.

Fully Usable Data-

The results that do not carry "J" or "red-line" are fully usable.

A.2.2 The data assessment is given below and on the attached sheets.

From September 30, 2104 through October 23, 2014, U.S. EPA, Region II, RST 3 personnel collected 12 air samples, including three field blanks and one lot blank, from the Puerto Rico Olefins Asbestos Site, located at PR 385 KM 5.4 Int., 127 Tallaboa Ponente, Ward Penuelas, Puerto Rico. Within 24 hours of collections, all samples were shipped via FedEx to Batta Laboratories, 6 Garfield Way, Newark, DE. The laboratory verified that the samples were received intact and properly custody sealed.

All 12 air samples for asbestos were collected on a 25 mm, 0.45µm MCEF cassettes. Samples were prepared and analyzed for asbestos according to Phase Contrast Microscopy (PCM) using NIOSH Method 7400, Revision 3, Issue 2 (8/15/94). The limit of detection for the air method is 5.5 fibers for 100 fields of views, or 7 fibers per square millimeters. All 12 samples were also analyzed for Transmission Electron Microscopy (TEM) by NIOSH Method 7402, Issue 2 (8/15/94). The target sensitivity for the air method is 0.004 fiber/cc.

.Client identification (ID) and laboratory ID numbers are as follows:

<u>Client ID No.</u>	<u>Laboratory ID</u>	<u>Matrix</u>	<u>Sampling</u>	<u>Analysis</u>
<u>No</u>	<u>No</u>		<u>Date</u>	
Project No. L6888J				
FB-100214-001	802404/802412	Air	10/02/2014	Asbestos PCM and TEM
LOTB-100214-001	802405/802413	Air	10/02/2014	Asbestos PCM and TEM
P0001-AS04-0930	802406/802414	Air	9/30/2014	Asbestos PCM and TEM
P0001-AS05-0930	802407/802415	Air	9/30/2014	Asbestos PCM and TEM
P0001-AS06-0930	802408/802416	Air	9/30/2014	Asbestos PCM and TEM
P0001-AS07-1002	802409/802417	Air	10/02/2014	Asbestos PCM and TEM

Title: Evaluation of Asbestos Data
Data Assessment Narrative

<u>Client ID No.</u>	<u>Laboratory ID No</u>	<u>Matrix</u>	<u>Sampling Date</u>	<u>Analysis</u>
P0001-AS08-1002	802410/802418	Air	10/02/2014	Asbestos PCM and TEM
P0001-AS09-1002	802411/802419	Air	10/02/2014	Asbestos PCM and TEM
FB-101314-001	803185/803187	Air	10/13/2014	Asbestos PCM and TEM
PAS01-101314	803186/803188	Air	10/13/2014	Asbestos PCM and TEM
FB-102314-001	803546/803548	Air	10/23/2014	Asbestos PCM and TEM
PAS01-102314	803547/803549	Air	10/23/2014	Asbestos PCM and TEM

Asbestos PCM and TEM analyses by NIOSH Methods 7400 and 7402

Twelve air samples, including three field blanks and one lot blank, were analyzed by PCM – NIOSH Method 7400 and TEM-NIOSH Method 7402. All PCM data were reported in fibers/mm² and fibers/cc; and TEM data were reported in fibers/cc. Out of 12 samples, three field blanks, one lot blank, and six other field samples were reported as <7.0 fibers/mm² and other two samples were reported as 9.6 and 10.2 fiber/mm² (0.006 f/cc). Laboratory counted fibers in 100 fields for each sample. For PCM analysis, fibers greater than 5.0 um in length with an aspect ratio of ≥3:1 were reported. For TEM analysis laboratory reported fibers >5 um in length and >0.25 um in width as per NIOSH Method 7402.

All 12 samples were also analyzed for TEM by NIOSH Method 7402. Laboratory opened the minimum 40 grids or 100 fibers were counted. All TEM results were reported below the limit of detection.

For QC purposes, the laboratory performed reanalysis of four samples per batch. All QC results are acceptable. Laboratory also included Calibration Sheet, PCM and TEM Routine Alignment & calibration Form, and Analytical Bench Sheet with the data package.

The results presented for the air samples are acceptable as reported. No qualifications were required.

ASBESTOS – PCM and TEM TABULATED RESULTS

Client Sample ID Number	Laboratory Sample ID Number	PCM – NIOSH 7400						TEM - NIOSH 7402	
		Volume (liters)	Fibers	Fields	LOD (f/cc)	Fibers /mm2	Fibers/cc	TEM Results (f/cc)	Asbestos Type Detected
Sampling Date: October 2, 2014									
FB-100214-001	802404/802412	-	<5.5	100	-	<7.0	*	n/a	n/a
LOTB-100214-001	802405/802413	-	<5.5	100	-	<7.0	*	n/a	n/a
P0001-AS04-0930	802406/802414	621.7	<5.5	100	0.004	<7.0	<0.004	<0.004	None Detected

STANDARD OPERATING PROCEDURE

Page 3 of 3

Title: Evaluation of Asbestos Data
Data Assessment Narrative

Client Sample ID Number	Laboratory Sample ID Number	Volume (liters)	Fibers	PCM - NIOSH 7400				TEM - NIOSH 7402	
				Fields	LOD (f/cc)	Fibers /mm ²	Fibers/cc	TEM Results (f/cc)	Asbestos Type Detected
P0001-AS05-0930	802407/ 802415	620.6	<5.5	100	0.004	<7.0	<0.004	<0.004	None Detected
P0001-AS06-0930	802408/ 802416	606.3	7.5	100	0.004	9.6	0.006	<0.004	None Detected
P0001-AS07-1002	802409/ 802417	599.9	<5.5	100	0.004	<7.0	<0.004	<0.004	None Detected
P0001-AS08-1002	802410/ 802418	600	<5.5	100	0.004	<7.0	<0.004	<0.004	None Detected
P0001-AS09-1002	802411/ 802419	664.9	8	100	0.004	10.2	0.006	<0.004	None Detected
FB-101314-001	803185/ 803187	-	<5.5	100	-	<7.0	*	n/a	n/a
PAS01-101314	803186/ 803188	548.8	<5.5	100	0.005	<7.0	<0.005	<0.004	None Detected
FB-102314-001	803546/ 803548	-	<5.5	100	-	<7.0	*	n/a	n/a
PAS01-102314	803547/ 803549	496.1	<5.5	100	0.005	<7.0	<0.005	<0.005	None Detected


* - Field Blank/Lot Blank
Fibers/mm² - Fibers per millimeter square
Fibers/cc - Fibers per cubic centimeter

LOD - Limit of Detection
n/a - not applicable

A.2.3 Contract Problem/Non-Compliance:

None

Contractor Reviewer:



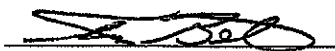
Smita Sumbaly

Signature:

11/10/14

Date:

Verified by:



Signature:

11/10/14

Date:

Dedicated to a Cleaner
Environment Since 1982



batta
LABORATORIES

BATTA LABORATORIES, INC.

A Certified MBE Company

Delaware Industrial Park, 6 Garfield Way,
Newark, DE 19713-5817
Tel. (302) 737-3376 Fax (302) 737-5764

Web: <http://www.battaenv.com> E-mail: battaenv@battaenv.com

E.P.A. LAB ID # DE 004



A.I.H.A. /NLLAP
#100448



NVLAP
#101032

CERTIFICATE OF PCM ANALYSIS

Page 1 of 2

Test Method: NIOSH 7400, Issue 2: 15 August 1994

Report Date: 10/6/2014

Sampling Data

BLI Project#: L6888J
Project Name: WESTON SOLUTIONS-RFP NO. 303-EP-S2-14-01

Date Sampled: 10/2/14
Sampled By: CLIENT
Date Analyzed: 10/4/14

Analytical Parameters

Effective Filter Area (mm²): 385

Graticule Field Area (mm²): 0.00785

Lab Sample #	Client Sample #	Sample Type	Sample Volume(L)	Fields	Fibers	Detection Limit(F/cc)	Test Results	
							F/mm ²	F/cc
802404	FB-100214-001	FB	0	100	<5.6	N/A	<7.0	N/A
802405	LOTB-100214-001	LB	0	100	<5.5	N/A	<7.0	N/A
802406	P0001-AS04-0930	FS	621.7	100	<5.5	0.004	<7.0	<0.004
802407	P0001-AS05-0930	FS	620.6	100	<5.5	0.004	<7.0	<0.004
802408	P0001-AS06-0930	FS	606.3	100	7.5	0.004	9.6	0.006
802409	P0001-AS07-1002	FS	599.9	100	<5.5	0.004	<7.0	<0.004

ANALYST: A. YOHN

REVIEWED BY: 

- * Sample results listed above are not blank-corrected.
- * Results pertain only to the items tested.
- * This report does not constitute endorsement by AIHA and/or any other U.S. government agencies.
- * Named analyst may not be sole analyst. Refer to Chain of Custody for additional analysts.
- * Sample volumes are calculated from data supplied by the client. Batta Laboratories, Inc. does not accept liability for results expressed in fibers per cubic centimeter. Furthermore, Batta Laboratories assumes no responsibility for the accuracy of results reflected by the use of improper collection techniques or equipment.
- * Current YTD intralaboratory Sr value is 0.22. This value may change slightly over time.

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Web : <http://www.battaenv.com>

E-mail : battaenv@battaenv.com

E.P.A. LAB ID # DE 004



A.I.H.A. /NLLAP
#100448



NVLAP
#101032

CERTIFICATE OF PCM ANALYSIS

Page 2 of 2

Test Method: NIOSH 7400, Issue 2: 15 August 1994

Report Date: 10/8/2014

Sampling Data

BLI Project#: L6888J

Project Name: WESTON SOLUTIONS-RFP NO. 303-EP-S2-14-01

Date Sampled: 10/2/14

Sampled By: CLIENT

Date Analyzed: 10/4/14

Analytical Parameters

Effective Filter Area (mm²): 385

Graticule Field Area (mm²): 0.00785

Lab Sample #	Client Sample #	Sample Type	Sample Volume(L)	Fields	Fibers	Detection Limit(F/cc)	Test Results	
							F/mm ²	F/cc
802410	P0001-AS08-1002	FS	600	100	<5.5	0.004	<7.0	<0.004
802411	P0001-AS09-1002	FS	664.9	100	8	0.004	10.2	0.006

ANALYST: A. YOHN

REVIEWED BY: 

- * Sample results listed above are not blank-corrected.
- * Results pertain only to the items tested.
- * This report does not constitute endorsement by AIHA and/or any other U.S. government agencies.
- * Named analyst may not be sole analyst. Refer to Chain of Custody for additional analysts.
- * Sample volumes are calculated from data supplied by the client. Batta Laboratories, Inc. does not accept liability for results expressed in fibers per cubic centimeter. Furthermore, Batta Laboratories assumes no responsibility for the accuracy of results reflected by the use of improper collection techniques or equipment.
- * Current YTD intralaboratory Sr value is 0.22. This value may change slightly over time.

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Newark, DE 19713-5817
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E.P.A. LAB ID # DE 004



A.I.H.A. /NLLAP
#100448



NVLAP
#101032

CERTIFICATE OF PCM ANALYSIS

Page 1 of 1

Test Method: NIOSH 7400, Issue 2: 15 August 1994

Report Date: 11/5/2014

Sampling Data

BLI Project#: L6888J
Project Name: WESTON SOLUTIONS-RFP NO. 303-EP-S2-14-01

Date Sampled: 10/13/14
Sampled By: CLIENT
Date Analyzed: 10/16/14

Analytical Parameters

Effective Filter Area (mm²): 385

Graticule Field Area (mm²): 0.00785

Lab Sample #	Client Sample #	Sample Type	Sample Volume(L)	Fields	Fibers	Detection Limit(F/cc)	Test Results	
							F/mm ²	F/cc
803185	FB-101314-001	FB	0	100	<5.5	N/A	<7.0	N/A
803186	PAS01-101314	FS	548.8	100	<5.5	0.005	<7.0	<0.005

ANALYST: JUDY XU

REVIEWED BY: 

- * Sample results listed above are not blank-corrected.
- * Results pertain only to the items tested.
- * This report does not constitute endorsement by AIIHA and/or any other U.S. government agencies.
- * Named analyst may not be sole analyst. Refer to Chain of Custody for additional analysts.
- * Sample volumes are calculated from data supplied by the client. Batta Laboratories, Inc. does not accept liability for results expressed in fibers per cubic centimeter. Furthermore, Batta Laboratories assumes no responsibility for the accuracy of results reflected by the use of improper collection techniques or equipment.
- * Current YTD intralaboratory Sr value is 0.22. This value may change slightly over time.

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#100448



NVLAP
#101032

CERTIFICATE OF PCM ANALYSIS

Page 1 of 1

Test Method: NIOSH 7400, Issue 2: 15 August 1994

Report Date: 10/28/2014

Sampling Data

BLI Project#: L6888J

Project Name: WESTON SOLUTIONS-RFP NO. 303-EP-S2-14-01

Date Sampled: 10/23/14

Sampled By: CLIENT

Date Analyzed: 10/27/14

Analytical Parameters

Effective Filter Area (mm²): 385

Graticule Field Area (mm²): 0.00785

Lab Sample #	Client Sample #	Sample Type	Sample Volume(L)	Fields	Fibers	Detection Limit(F/cc)	Test Results	
							F/mm ²	F/cc
803546	FB-102314-001	FB	0	100	<5.5	N/A	<7.0	N/A
803547	PAS01-102314	FS	496.1	100	<5.5	0.005	<7.0	<0.005

ANALYST: JUDY XU

REVIEWED BY: 

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- * Results pertain only to the items tested.
- * This report does not constitute endorsement by AIHA and/or any other U.S. government agencies.
- * Named analyst may not be sole analyst. Refer to Chain of Custody for additional analysts.
- * Sample volumes are calculated from data supplied by the client. Batta Laboratories, Inc. does not accept liability for results expressed in fibers per cubic centimeter. Furthermore, Batta Laboratories assumes no responsibility for the accuracy of results reflected by the use of improper collection techniques or equipment.
- * Current YTD intralaboratory Sr value is 0.22. This value may change slightly over time.

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A.I.H.A./NVLAP
#100448

NVLAP
#101032

SAMPLE SUMMARY REPORT

Revision#: _____

COC#: MULTIPLE

Page 1 of 2

Batch #: MULTIPLE

Test Method: NIOSH 7402 (Issue 2: 15 August 1994)

Prep Method: NIOSH 7402 (Issue 2: 15 August 1994)

General Information

BLI Project #: L6888J

Project Name: WESTON SOLUTIONS, INC. - RFP# 303

Sampling Location: PR OLEFINS REMOVAL/SITE 0001-0005

Date Sampled: MULTIPLE

Sampled by: CLIENT

Date Received: MULTIPLE

Report Date: MULTIPLE

Analytical Data

Note: Results provided in this summary report do not have to agree with those obtained from the EPA NADES EDD report.

Primary Filter Area (mm²): 3852nd Filter Area (mm²): N/A

Media: MCE

Grid Area (mm²): 0.0094

Date Prepped: MULTIPLE

Prepped By: JX/ARY

Date Analyzed: MULTIPLE

Analyzed By: JX/ARY

Sample ID and Prep Information				Analytical Data				Results			
Lab Sample Number	Field Sample Number	Sample QA Type-Prep Type	Dilution Factor	Air Volume (L) PCM Fields PCM Fibers	# of Grid Openings Area Analyzed (mm ²) Total # of TEM PCM Fibers	Total # of Asb. by TEM Asb. Fiber Ratio f/cc by PCM	Asbestos Mineral Type Detected	Target Sensitivity (f/cc)	Reported Sensitivity (f/cc)	Reported Air Concentration (f/cc)	Reported Filter Density (f/mm ²)
802412	FB-100214-001	FIELD BLANK DIRECT	1	0 100 0.5	40 0.3760 0.0	0.0 0.000 N/A	NON-DETECTED	0.00500	N/A	N/A	< 7.00637
802413	LOTB-100214-001	LOT BLANK DIRECT	1	0 100 0	40 0.3760 0.0	0 0.000 N/A	NON-DETECTED	0.00500	N/A	N/A	< 7.00637
802414	P0001-AS04-093014	FIELD SAMPLE DIRECT	1	621.72 100 4.5	40 0.3760 0.0	0 0.000 < 0.004	NON-DETECTED	0.00500	0.00165	< 0.00434	< 7.00637
802415	P0001-AS05-093014	FIELD SAMPLE DIRECT	1	620.58 100 1	40 0.3760 0.0	0 0.000 < 0.004	NON-DETECTED	0.00500	0.00166	< 0.00435	< 7.00837
802416	P0001-AS08-093014	FIELD SAMPLE DIRECT	1	806.33 100 7.5	40 0.3760 0.0	0 0.000 0.006	NON-DETECTED	0.00500	0.00169	< 0.00445	< 7.00637
802417	P0001-AS07-100214	FIELD SAMPLE DIRECT	1	599.88 100 3.5	40 0.3760 0.0	0 0.000 < 0.004	NON-DETECTED	0.00500	0.00171	< 0.00450	< 7.00637
802418	P0001-AS08-100214	FIELD SAMPLE DIRECT	1	600.04 100 4	40 0.3760 0.0	0 0.000 < 0.004	NON-DETECTED	0.00500	0.00171	< 0.00450	< 7.00637
802419	P0001-AS09-100214	FIELD SAMPLE DIRECT	1	964.93 100 8	40 0.3760 0.0	0 0.000 0.006	NON-DETECTED	0.00500	0.00154	< 0.00406	< 7.00637
803187	FB-101314-001	FIELD BLANK DIRECT	1	0 100 0	40 0.3760 0.0	0 0.000 N/A	NON-DETECTED	0.00500	N/A	N/A	< 7.00637
803188	PAS01-101314	FIELD SAMPLE DIRECT	1	548.8 100 2	40 0.3760 6.5	0 0.077 < 0.005	NON-DETECTED	0.00500	0.00187	< 0.00492	< 7.00637

Note: Reported Sensitivity is calculated based on the actual number of asbestos fibers detected in TEM. Asb. (asbestos). Fiber Ratio is the ratio of the number of asbestos over the total number of fibers detected in TEM.

Analyst(s): J. XU

*NOTE:

1. LA: Libby Amphibole; AC: Actinolite; TR: Tremolite; CH: Chrysotile; CR: Crocidolite; AN: Anthophyllite; AM: Amosite
2. Indirect sample prep is based on ISO 13794:1998(E): Ambient air-Determination of asbestos fibers-Indirect-transfer transmission electron microscopy method. Refer to sample prep sheets for dilution details.
3. Some samples may be analyzed and/or prepped by multiple instruments, analysis, or on multiple dates. Please refer to the sample prep sheets and analytical benchsheets for details.
4. This summary report may not include all information submitted by clients. Furthermore, Batta will not be responsible for results that are due to improper sample collection and inaccurate data provided by clients.
5. This summary report precedes all electronic versions of any kinds, including copies in full or in part.
6. This summary report does not constitute endorsement by NVLAP and/or any other U.S. government agencies. The test data pertain only to the items tested. No assumptions or conclusions should be made to materials or samples not analyzed.

Reviewed By: _____

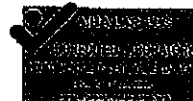
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#101032

SAMPLE SUMMARY REPORT

Revision#: _____

COC#: MULTIPLE

Page 2 of 2

Batch #: MULTIPLE

Test Method: NIOSH 7402 (Issue 2: 15 August 1994)

Prep Method: NIOSH 7402 (Issue 2: 15 August 1994)

General Information

BLI Project #: L6888J

Project Name: WESTON SOLUTIONS, INC. - RFP# 303

Sampling Location: PR OLEFINS REMOVAL/SITE 0001-0005

Date Sampled: MULTIPLE

Sampled by: CLIENT

Date Received: MULTIPLE

Report Date: MULTIPLE

Analytical Data

Note: Results provided in this summary report do not have to agree with those obtained from the EPA NADES EDD report.

Primary Filter Area (mm²): 3852nd Filter Area (mm²): N/A

Media: MCE

Grid Area (mm²): 0.0094

Date Prepped: MULTIPLE

Prepped By: JX/ARY

Date Analyzed: MULTIPLE

Analyzed By: JX/ARY

Sample ID and Prep Information				Analytical Data				Results			
Lab Sample Number	Field Sample Number	Sample QA Type-Prep Type	Dilution Factor	Air Volume (L) PCM Fields PCM Fibers	# of Grid Openings Area Analyzed (mm ²) Total # of TEM PCME Fibers	Total # of Asb. by TEM Asb. Fiber Ratio f/cc by PCM	Asbestos Mineral Type Detected	Target Sensitivity (f/cc)	Reported Sensitivity (f/cc)	Reported Air Concentration (f/cc)	Reported Filter Density (f/mm ²)
803548	FB-102314-001	FIELD	1	0	40	0.0	NON-DETECTED	0.00500	N/A	N/A	< 7.00637
		BLANK		100	0.3760	0.000					
		DIRECT		2	0.0	N/A					
803549	PAS01-102314	FIELD	1	496.09	40	0	NON-DETECTED	0.00500	0.00206	< 0.00544	< 7.00637
		SAMPLE		100	0.3760	1.000					
		DIRECT		4	0.5	< 0.005					

Note: Reported Sensitivity is calculated based on the actual number of asbestos fibers detected in TEM. Asb. (asbestos) Fiber Ratio is the ratio of the number of asbestos over the total number of fibers detected in TEM.

Analyst(s): J. XU

*NOTE:

1. LA: Libby Amphibole; AC: Actinolite; TR: Tremolite; CH: Chrysotile; CR: Crocidolite; AN: Anthophyllite; AM: Amosite

2. Indirect sample prep is based on ISO 13794:1999(E): Ambient air-Determination of asbestos fibers-Indirect-transfer transmission electron microscopy method. Refer to sample prep sheets for dilution details.

3. Some samples may be analyzed and/or prepped by multiple instruments, analysts, or on multiple dates. Please refer to the sample prep sheets and analytical benchsheets for details.

4. This summary report may not include all information submitted by clients. Furthermore, Batta will not be responsible for results that are due to improper sample collection and inaccurate data provided by clients.

5. This summary report precedes all electronic versions of any kinds, including copies in full or in part.

6. This summary report does not constitute endorsement by NVLAP and/or any other U.S. government agencies. The test data pertain only to the items tested. No assumptions or conclusions should be made to materials or samples not analyzed.

Reviewed By: 

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CERTIFICATE OF TEM ANALYSIS

Page 1 of 1

NIOSH 7402, Asbestos by TEM

Report Date: 10/6/2014

Sampling Data

BLI Project #: L6888J

Project Name: Weston Solutions

Date Sampled: 9/30 & 10/2/2014

Sampling Location: SITE 0001-0005

Sampled By: CLIENT

Date Received: 10/3/14

Analytical Data

Effective Filter Area (mm²): 385

Media: MCE

Pore Size (µm): 0.45

Grid Area (mm²): 0.0094

Date Prepped: 10/4/14

Prepped By: JX/AY

Date Analyzed: 10/4/2014

Analyzed By: AY

Client-Supplied Data				Analytical Data				Results		
Lab Sample #	Client Sample #	Sample Type	Sample Location	Sample Volume (L)	PCM (fibers/cc)	PCM (f/mm ²)	TEM Total Fibers (f/cc)	Limit of Detection (f/cc)	Reported Result * (f/cc)	Asbestos Types Detected
802412	FB-100214-001	FIELD BLANK	N/A	0	N/A	0.64	N/A	N/A	N/A	None Detected
802413	LOTB-100214-001	LOT BLANK	N/A	0	N/A	0.00	N/A	N/A	N/A	None Detected
802414	P0001-AS04-093014	FIELD SAMPLE	N/A	621.72	0.004	5.73	0.000	0.004	< 0.004	None Detected
802415	P0001-AS05-093014	FIELD SAMPLE	N/A	620.58	0.001	1.27	0.000	0.004	< 0.004	None Detected
802416	P0001-AS06-093014	FIELD SAMPLE	N/A	606.33	0.006	9.55	0.000	0.004	< 0.004	None Detected
802417	P0001-AS07-100214	FIELD SAMPLE	N/A	599.88	0.003	4.48	0.000	0.004	< 0.004	None Detected
802418	P0001-AS08-100214	FIELD SAMPLE	N/A	600.04	0.003	5.10	0.000	0.004	< 0.004	None Detected
802419	P0001-AS09-100214	FIELD SAMPLE	N/A	664.93	0.006	10.19	0.000	0.004	< 0.004	None Detected

* Reported result is expressed as f/cc Asbestos in the Visible Range.

** This sample batch contains sample(s) that have volumes below 400L. According to NIOSH 7402, samples with volumes under 400L should not be analyzed by this method.

AY
PCM Analyst

AY
TEM Analyst

Reviewed By: 

Results pertain only to the items tested. Lab is not responsible for results expressed in f/cc, which are calculated from volumes supplied by the client. This report may not be duplicated in part without written permission from BATTA Laboratories.

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CERTIFICATE OF TEM ANALYSIS

Page 1 of 1

NIOSH 7402, Asbestos by TEM

Report Date: 10/17/2014

Sampling Data

BLI Project #: L6888J

Project Name: WESTON SOLUTIONS - PR OLEFINS REMOVAL

Sampling Location: SITE# 0001-0005

Date Sampled: 10/13/2014

Sampled By: CLIENT

Date Received: 10/15/14

Analytical Data

Effective Filter Area (mm²): 385

Media: MCE

Pore Size (µm): 0.80

Grid Area (mm²): 0.0090

Date Prepped: 10/16/14

Prepped By: JX

Date Analyzed: 10/16/2014

Analyzed By: JX

Client-Supplied Data				Analytical Data				Results		
Lab Sample #	Client Sample #	Sample Type	Sample Location	Sample Volume (L)	PCM (fibers/cc)	PCM (f/mm ²)	TEM Total Fibers (f/cc)	Limit of Detection (f/cc)	Reported Result * (f/cc)	Asbestos Types Detected
803187	FB-101314-001	AIR	NA	0	N/A	0.00	N/A	N/A	N/A	None Detected
803188	PAS01-101314	AIR	NA	548.8	0.002	2.55	0.013	0.005	< 0.005	None Detected

* Reported result is expressed as f/cc Asbestos in the Visible Range.

**This sample batch contains sample(s) that have volumes below 400L. According to NIOSH 7402, samples with volumes under 400L should not be analyzed by this method.

JX

PCM Analyst

J. XU

TEM Analyst


Reviewed By:

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CERTIFICATE OF TEM ANALYSIS

Page 1 of 1

NIOSH 7402, Asbestos by TEM

Report Date: 10/28/2014

Sampling Data

BLI Project #: L6888J

Project Name: WESTON SOLUTION-RR OLEFINS REMOVAL

Date Sampled: 10/23/2014

Sampling Location: RR OLEFINS REMOVAL

Sampled By: CLIENT

Date Received: 10/24/14

Analytical Data

Effective Filter Area (mm²): 385

Media: MCE

Pore Size (µm): 0.80

Grid Area (mm²): 0.0090

Date Prepped: 10/27/14

Prepped By: JX

Date Analyzed: 10/27/2014

Analyzed By: JX

Client-Supplied Data				Analytical Data				Results		
Lab Sample #	Client Sample #	Sample Type	Sample Location	Sample Volume (L)	PCM (fibers/cc)	PCM (f/mm ²)	TEM Total Fibers (f/cc)	Limit of Detection (f/cc)	Reported Result* (f/cc)	Asbestos Types Detected
803548	FB-102314-001	TEM	NA	0	N/A	2.55	N/A	N/A	N/A	None Detected
803549	PAS01-102314	TEM	NA	496.09	0.004	5.10	0.001	0.005	< 0.005	None Detected

* Reported result is expressed as f/cc Asbestos in the Visible Range.

**This sample batch contains sample(s) that have volumes below 400L. According to NIOSH 7402, samples with volumes under 400L should not be analyzed by this method.

JX

PCM Analyst

J. XU

TEM Analyst


Reviewed By:

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FIELD COC

CHAIN OF CUSTODY RECORD
Site #: 0001-0005
Contact Name: Smitta Sumbaly
Contact Phone: 732-585-4410

USEPA
DateShipped: 10/2/2014
CarrierName: FedEx
AirbillNo: 8000 9357 9235

CHAIN OF CUSTODY RECORD

[illegible]

Special Instructions: Total Sampling time units in minutes.

Turnaround time 72 hrs.

Provide TWA calculations.

REF: 303

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

[illegible]

US EPA

DateShipped: 10/13/2014

CarrierName: FedEx

AirbillNo: 800093579268

CHAIN OF CUSTODY RECORD

PR Olefins Removal

Contact Name: Smita Sumbaly

Contact Phone: 732-585-4410

No: 2-101314-00010005-0001

Cooler #: 001

Lab: Batta environmental Associates, Inc.

Lab Phone: 302-737-3376

[illegible]

Special Instructions: Total Sampling time units in minutes.

Turnaround time 72 hrs.



Provide TWA calculations.

RF#: 303

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
All/most	Amg / [Signature]	10-13-14	Bunice Mu: BANA LABORATORIES	10/14/2020	ACCEPTANCE

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
AMT Trust		10-23-14		10/23/14	Good